ORDER FOR SUPPLIES AND SERVICES

IMPORTANT: See Instructions in GSAR 553.370-300-1 for distribution

PAGE 1 OF 1 PAGE(S)

1. DATE OF ORDER	2. ORDER NUMBER	3. CONTRACT NUMBER	4. ACT NUMBER
06/22/2017	GSQ1117BJ0031	GS00Q14OADU142	A21294918

FOR GOVERNMENT USE ONLY

5. ACCOUNTING CLASSIFICATION

6. FINANCE DIVISION

FUND	ORG CODE	B/A CODE	O/C CODE	AC	SS	VENDOR NAME
285F	Q11FA000	AA20	25			
FUNC CODE	C/E CODE	PROJ./PROS. NO.	CC-A	MDL	FI	G/L DEBT
AF151	H08					
W/ITEM	CC-B	PRT./CRFT		AI	LC	DISCOUNT

7. TO: CONTRACTOR *(Name, address and zip code)*
Tina M Norris
WYLE LABORATORIES, INC.
345 BOB HEATH DR
HUNTSVILLE, AL 35806-2842
United States
310-563-6821

8. TYPE OF ORDER
B. DELIVERY

REFERENCE YOUR

Please furnish the following on the terms specified on both sides of the order and the attached sheets, if any, including delivery as indicated.

This delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above numbered contract.

C. MODIFICATION NO.
000
TYPE OF MODIFICATION

AUTHORITY FOR ISSUING

9A. EMPLOYER'S IDENTIFICATION NUMBER	9B. CHECK, IF APPROP WITHHOLD 20%	Except as provided herein, all terms and conditions of the original order, as heretofore modified, remain unchanged.
(b) (6) [redacted]		

10A. CLASSIFICATION	10B. TYPE OF BUSINESS ORGANIZATION
Contracts and Grants	C. Corporation

11. ISSUING OFFICE *(Address, zip code, and telephone no.)*	12. REMITTANCE ADDRESS *(MANDATORY)*	13. SHIP TO *(Consignee address, zip code and telephone no.)*
GSA Region 11 Daniel K. Higgins 3017th St SW WASHINGTON, DC 20407-0001 United States 202-708-5627	WYLE LABORATORIES, INC P O BOX 077777 HUNTSVILLE,AL 35807-0000 United States	Ryan T Norman 4800 MARK CENTER DRIVE SUITE 07J22 ALEXANDRIA, VA 22350 United States 571-372-2600

14. PLACE OF INSPECTION AND ACCEPTANCE	15. REQUISITION OFFICE *(Name, symbol and telephone no.)*
Ryan T Norman 4800 MARK CENTER DRIVE SUITE 07J22 ALEXANDRIA, VA 22350 United States	Mignon Y Stephens GSA Region 11 1800 F ST NW WASHINGTON, DC 20405-0001 United States 202-260-3766

16. F.O.B. POINT	17. GOVERNMENT B/L NO.	18. DELIVERY F.O.B. POINT ON OR BEFORE	19. PAYMENT/DISCOUNT TERMS
Destination		06/23/2018	NET 30 DAYS / 0.00 % 0 DAYS / 0.00 % 0 DAYS

20. SCHEDULE

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0001	Program Management - Base Year	1	lot	(b) (4) [redacted]	
0002	Expansion of TENA - Base Year	1	lot		
0003	Solutions Development - Base Year	1	lot		
0004	Solutions Assessment - Base Year	1	lot		
0005	Capability Information Assurance - Base Year	1	lot		
0006	Performance and Reliability of Test and Training Capabilities - Base Year	1	lot		
0007	Base Year- Travel - CLIN 0007	1	lot		
0008	ODC - CLIN 0008	1	lot		

21. RECEIVING OFFICE *(Name, symbol and telephone no.)* DOD TEST RESOURCE MANAGEMENT CENTER, 571-372-2600		TOTAL From 300-A(s)
22. SHIPPING POINT Specified in QUOTE	23. GROSS SHIP WT.	GRAND TOTAL **$1,601,941.75**
24. MAIL INVOICE TO: *(Include zip code)* General Services Administration (FUND) The contractor shall follow these Invoice Submission Instructions. The contractor shall submit invoices electronically by logging into the ASSIST portal (https://portal.fas.gsa.gov), navigating to the appropriate order, and creating the invoice for that order. For additional assistance contact the ASSIST Helpdesk at 877-472-4877. Do NOT submit any invoices directly to the GSA Finance Center (neither by mail nor via electronic submission).	25A. FOR INQUIRIES REGARDING PAYMENT CONTACT: GSA Finance Customer Support 26A. NAME OF CONTRACTING/ORDERING OFFICER *(Type)* Daniel K. Higgins 26C. SIGNATURE Daniel K. Higgins 06/23/2017	25B. TELEPHONE NO. 816-926-7287 26B. TELEPHONE NO. 202-708-5627
GENERAL SERVICES ADMINISTRATION	**1. PAYING OFFICE**	**GSA FORM 300 (REV. 2-93)**

C.1 BACKGROUND

The Test Resource Management Center (TRMC) has been implementing the Test and Training Enabling Architecture (TENA) for over 15 years, in order to establish, maintain, and expand reliable test range interoperability, through the use of a common architecture. Reliable range interoperability requires the use of a common architecture (including a common language, communication mechanism and context) to meaningfully communicate across divergent systems. Moreover, effective reuse of range resources requires well-documented system interfaces that ensure commonality. TENA enables reliable, interoperable, reusable, and composable connectivity of geographically distributed range resources, some live and some simulated, that can be rapidly combined to meet new testing and training missions in a realistic manner. The expansion, operations, and future modernization of TENA is the responsibility of the TENA Software Development Activity (SDA), under TRMC, with sponsorship from the Central Test and Evaluation Investment Program (CTEIP) and the Joint Staff J7 Joint National Training Capability (JNTC).

C.1.1 PURPOSE

The purpose is to develop custom solutions to system integration challenges through the development of composable interoperability solutions.

C.1.2 MISSION

The mission of TENA is to assess and address enterprise Test and Evaluation (T&E) and training infrastructure requirements in order to expand TENA operations.

C.2 SCOPE

2.1 The contractor shall provide program management support under this TO. This includes the management and oversight of all activities performed by contractor personnel, including subcontractors, to satisfy the requirements identified in this Performance Work Statement.

2.2 This TO will be for the purchase of professional software engineering services. Services under this requirement are highly specialized and are a continuation of providing support at the customer/user level for multiple locations worldwide. The focus is research and development, and some Test and Evaluation (T&E), while these individual custom solutions are developed.

2.3 This TO will continue the integration of another 10 to 20 sites into the Joint Mission Environment Test Capability (JMETC) as they will be incorporating TENA as part of their interoperability enhancements.

C.3 ENVIRONMENT

TENA operates in an environment, which supports Department of Defense (DoD) sites world-wide, including the US Army, US Navy, US Marine Corps and US Air Force. Additionally,

TENA interacts with test ranges operated by other countries, including the United Kingdom, Australia, and Sweden. Currently, 76 sites have incorporated TENA, as part of their integration onto the Joint Mission Environment Test Capability (JMETC). The test ranges include both live and simulated ranges, which can be both standalone and integrated. The operation of TENA is the responsibility of the Test Resource Management Center (TRMC).

C.4 OBJECTIVE

The objective of this TO is to assess and address unique requirements in order to incorporate additional sites into the test and training capability through the development of interoperability solutions. This serves two purposes: 1) to streamline integration of test and training capabilities and 2) to further enhance distributed training and testing. Through the reuse and interoperability of test and evaluation assets, the ranges will reduce development, operation and maintenance costs. Through research, data analysis, system development, evaluations, strategic planning and assessments, the TENA SDA will further its ongoing partnership with JMETC to expand the test and training connectivity and develop enhanced capabilities for the test and training facilities. Expanded capabilities will include assessing the process, methodology, and infrastructure for T&E requirements and will result in developed hardware and software solutions that address T&E needs.

C.5 TASKS

The following tasks are in support of this TO and are detailed below:

Task 1 – Program Management Support (FFP)
Task 2 – Expansion of TENA (CPFF)
Task 3 – Solutions Development (CPFF)
Task 4 – Solutions Assessment (CPFF)
Task 5 – Capability Information Assurance Support (CPFF)
Task 6 - Performance and Reliability of Test and Training Capabilities (CPFF)

C.5.1 TASK 1 – PROGRAM MANAGEMENT SUPPORT

The contractor shall provide program management support under this TO. This includes the management and oversight of all activities performed by contractor personnel, including sub-contractors, to satisfy the requirements identified in this Performance Work Statement (PWS). The contractor shall identify, by name, a Program Manager (PM), who shall provide management, direction, administration, quality control, and leadership of the execution of this TO. The contractor shall schedule meetings, and provide deliverables in accordance with (IAW) Section D of this PWS.

C.5.1.1 SUBTASK 1 – COORDINATE A PROJECT KICK-OFF MEETING

The contractor shall schedule, coordinate, and host a Project Kick-Off Meeting at TRMC. The meeting will provide an introduction between the contractor personnel and Government personnel who will be involved with the TO. The meeting will provide the opportunity to discuss technical, management, and security issues, and travel authorization and reporting procedures, as well as any unique conditions of the OASIS contract, and relationship with GSA NCR. At a minimum, the attendees shall include vital contractor personnel, to include the PM, representatives from TRMC TENA, other relevant Government personnel (as may be identified by TRMC TENA), the TRMC

TENA Contracting Officer's Technical Representative (COTR), the NCR AAS Contracting Officer (CO), and NCR AAS Contracting Officer Representative (COR).

The contractor shall prepare Kick-Off Meeting: Post-Award Brief and Minutes no later than (NLT) 30 days after award.

C.5.1.2 SUBTASK 2 – PREPARE A MONTHLY STATUS REPORT (MSR)

The contractor shall develop and provide a Monthly Status Report (MSR) **Section J – Attachment C** – Monthly Status Report (MSR) using Microsoft (MS) Office Suite applications, by the monthly as required 7 days after completion via electronic mail to the Technical Point of Contact (TPOC) and the COR. The MSR shall include the following:

a. Activities during reporting period, by task (include: on-going activities, new activities, activities completed; progress to date on all above mentioned activities). Start each section with a brief description of the task.
b. Problems and corrective actions taken. Also include issues or concerns and proposed resolutions to address them.
c. Personnel gains, losses, and status (security clearance, etc.).
d. Government actions required.
e. Schedule (show major tasks, milestones, and deliverables; planned and actual start and completion dates for each).
f. Summary of trips taken, conferences attended, etc. (attach trip reports to this MSR for reporting period).
g. Accumulated invoiced cost for each CLIN up to the previous month.
h. Projected cost of each CLIN for the current month to document task progress and any actions for the Government.

The contractor shall provide (12) Monthly Status Reports per year as required NTE 24 over the life of the contract including the base period and option year.

C.5.1.3 SUBTASK 3 – PREPARE A PROJECT MANAGEMENT PLAN (PMP)

The contractor shall document all support requirements in a PMP. The contractor shall update the PMP as changes occur and shall work from the latest Government approved version of the PMP.

The PMP shall:

a. Describe the proposed management approach.
b. Contain detailed Standard Operating Procedures (SOPs) for all tasks.
c. Include milestones, tasks, and subtasks required in this TOR.
d. Provide for an overall Work Breakdown Structure (WBS) and associated responsibilities and partnerships between Government organizations.
e. Include the contractor's QCP.

The contractor shall provide the Government with a draft PMP on which the Government will make comments. The final PMP shall incorporate the Government's comments NLT 45 days after award.

C.5.1.4 SUBTASK 4 – PREPARE TRIP REPORTS

The Government will identify the need for a Trip Report when the request for travel is submitted. If a Trip Report requirement is identified by the Government, the contractor shall provide a Trip Report. The contractor shall keep a summary of all long-distance travel including the name of the employee, location of travel, duration of trip, and point of contact (POC) at the travel location, and provide this information in its monthly status reports.

The contractor shall provide the Government with Monthly Trip Reports as required NTE (12) per year over the expiration of the TO's base period and executed Option Period.

C.5.1.5 SUBTASK 5 – QUALITY CONTROL PLAN (QCP)

The contractor shall identify its approach to ensure quality control in meeting the requirements of the TO. The contractor shall describe its quality control methodology. The contractor shall periodically update the QCP, as changes in program processes are identified.

The contractor shall provide the Government with a Quality Control Plan NLT 90 days after award.

C.5.1.6 SUBTASK 6 – TRANSITION-IN

The contractor will work with the incumbent to deliver a plan to the TENA SDA for migrating any on-going efforts to this OASIS TO. The purpose of the Task Transition-In Management Plan is to ensure continuity of operations for the TENA SDA and its users across the test and training community. The Transition-In period shall begin at Project Start (PS). The contractor shall execute the transition IAW the approved Transition-In Plan.

The contractor shall provide the Government with a Task Transition-In Management Plan in support of this task order within 5 business days of award.

The Contractor shall execute the Transition-In plan and complete all activities within 10 business days after start of the Period of Performance (PoP).

During the Transition-In period, the Contractor shall assume full responsibility for all areas of operation in accordance with the terms and conditions of this Contract.

The Government will make all facilities and equipment accessible to the Contractor during the Transition-In period. During Transition-In period, the Contractor's management personnel will be permitted to observe any on-going operations, as approved by the COR.

Transition-In Plan minimum requirements:

Identify personnel filling key transition positions and project staffing for all tasks.

Develop a detailed schedule of activities for the transition-in execution period to include workload and milestones.

Identify program and project issues to the Government.

C.5.1.7 SUBTASK 7 – IN PROGRESS REVIEWS (IPR)

The contractor shall conduct a quarterly review prior to the completion of the base period and one 10 days prior to the end of the option period, if exercised. The contractor shall prepare and deliver an agenda one week prior to the IPR meeting to the TENA SDA and COR, for the purpose of Government review/modification and approval. The need for additional documentation beyond the specified deliverables to support a successful IPR will be determined by the Government once the IPR agenda has been approved.

The contractor shall provide the Government quarterly IPR Agendas in support of this task; NTE (20) agendas over the TO's base period and executed Option Period.

C.5.1.8 SUBTASK 8 – TRANSITION-OUT

The Transition-Out Plan shall facilitate the accomplishment of a seamless transition from the incumbent to an incoming contractor/Government personnel at the expiration of the TO. The Transition-Out Plan shall identify how it will coordinate with the incoming contractor and/or Government personnel to transfer knowledge regarding the following:

The contractor shall also establish and maintain effective communication with the incoming contractor/Government personnel for the period of the transition via weekly status meetings.

The contractor shall provide the Government with a Task Transition-Out Management Plan in support of this task order NLT 45 days after award.

The plan shall fully describe how the Contractor shall, at a minimum approach the following issues:

Removal of Contractor property.

Data and information transfer; all forms e.g. hard copy and electronic; and any other actions required to ensure continuity of operations.

C.5.1.9 SUBTASK 9 – IMPLEMENT TRANSITION-OUT PLAN

The contractor shall be prepared to implement its Transition-Out Plan NLT 30 calendar days prior to expiration of the TO's Base Period, or at the beginning of any executed Option Period. Upon completion of the contract, the contractor shall also deliver a final report detailing accomplishes and recommended next steps.

The contractor shall provide the Government with a Final Technical Report NLT 30 days prior to expiration of the TO's base period and executed Option Period.

C.5.2 TASK 2 – EXPANSION OF TENA

The contractor will develop technical architecture artifacts and provide systems engineering support to research, analyze, investigate, review, and assess existing test and training architecture plans and solutions and develop strategic plans and recommendations to expand the use of TENA across the DoD test and training communities, including assessing the current use of TENA and recommending improvements to address test and training interoperability. The product of this task is to develop plans and solutions assessments to support recommendations to expand and improve the interoperability test and training architecture for existing and new sites to support local testing in addition to testing conducted via the JMETC. Currently 76 sites have implemented TENA as part of their integration onto JMETC. It is anticipated that another 10 to 20 sites will be incorporating TENA as part of their interoperability enhancements. The incorporation of additional sites will require research and analysis of each site's capabilities to determine and develop requirements to successfully add the site to JMETC test and training events and exercises. The expansion of JMETC sites poses unique challenges as the incorporation of existing facilities requires developing an appropriate 'bridge' to enable vastly diverse facilities with various software and hardware capabilities to interoperate successfully.

The contractor shall provide the Government (5) Test and Training Architecture Plans and Solutions Assessments per year in support of this task order over the TO's base period and executed Option Period. The report shall include, at minimum, the following sections: background, description of need or issue, alternatives to address the need or issue, and recommendations. Each report should identify DoD test and training sites reviewed with a summary of findings and recommendations based on the current usage of TENA. Findings should include TENA performance and site usage issues (if any). Recommendations should include options to improve test and training interoperability and the recommended methods to expand TENA integration for the Joint Mission Environment Test Capability (JMETC).

C.5.3 TASK 3 – SOLUTIONS DEVELOPMENT

The contractor will assist in the development of user-specific hardware and software solutions that directly address strategic plans and recommendations documented in Test and Training Architecture Plans and Solutions Assessments. These solutions improve existing sites reliability and availability supporting JMETC interoperability events and exercises. These solutions will include research, engineering, prototype design and analyses, hardware and software solutions development, solution test planning and execution, and test fixture design and prototyping. Solutions shall be bounded by current DoD policies, instructions, directives and mandates governing JMETC tested training capabilities.

The contractor shall provide the Government (10) of each of the following, as required in support of this task order over (TO) the expiration of the TO's base period and executed Option Period:

- Draft Test Plans:
  The contractor shall prepare procedures for conducting tests based on research and analysis of hardware and hardware integration solutions related to the capabilities & configurations of each site assessed for the expansion of TENA in support of JMETC test and training capabilities. Each draft test plan should include, at minimum, a listing of items under test, test approach, pass/fail criteria, any items needed to conduct the test, and test deliverables.

- Test Reports:
  The contractor shall prepare reports documenting the findings and outcomes of the conducted tests supporting the expansion of TENA in support of JMETC test and training capabilities. A test report should include, at minimum, a summary of the test itself, variances observed or determined for each test item, a summary of results, and an assessment and/or evaluation.

- Prototype Design and System Reports:
  The contractor shall provide to the requesting activity all designs, hardware/software systems, and supporting documentation developed under this task order.

C.5.4 TASK 4 – SOLUTIONS ASSESSMENT

The contractor will review, analyze, and assess the results of the solutions development experiments and provide recommendations to incorporate new sites with TENA in support of distributed test and training capabilities. The recommendations will assess emerging requirements and technologies in order to provide detailed insights to improve interoperability of vastly diverse systems and capabilities at ranges, facilities, system integration laboratories government facilities, academia, and sites supporting test and training events and exercises.

The contractor shall provide the Government (10) Solutions Recommendation Reports, as required in support of this task order (TO) over the expiration of the TO's base period and executed Option Period.

These reports shall provide recommendations from the analysis including appropriate requirements to support expansion and improvement of TENA for the test and training capabilities. The contractor shall provide results of assessing the TENA development environment with recommendations to ensure the TENA development laboratory is updated as sites are incorporated into the TENA test and training capability. The Solutions Recommendation Report should include, at minimum, a brief description of the solution and its intended use, a summary of any

notable successes, issues, and problems encountered during development, and recommendations for improvements to either propagate successes to other areas or mitigate the occurrence of identified issues or problems from occurring again.

C.5.5 TASK 5 - Capability Information Assurance Support

The contractor will develop technical architecture artifacts, and provide systems engineering support in order to research, analyze, investigate, review, and provide recommendations to address cybersecurity and information assurance requirements IAW current DoD policies, instructions, directives and mandates. The recommendations will ensure that all solutions consider cyber-security as part of system design while conforming to all current DoD IA policies and procedures. The contractor will also provide engineering support in order to provide recommendations to the government for certifying and accrediting identified capabilities for use across multiple test and training ranges.

The contractor shall provide the Government (10) Capability Information Assurance Recommendations Reports as required, in support of this task order (TO) over the expiration of the

TO's base period and executed Option Period. These reports shall provide recommendations from the analysis including appropriate actions to take to ensure cybersecurity is engineered into each delivered capability. The report should include, at minimum, the following sections: background, description of Information Assurance (IA) considerations, system design, implementation, and process alternatives to address IA considerations, and recommendations.

C.5.6 TASK 6 – PERFORMANCE AND RELIABILITY OF TEST AND TRAINING CAPABILITIES

The contractor will assess emerging requirements and technologies such as leaps in processor performance, bandwidth and speed, memory technology improvements, network interface hardware, interface mechanisms, and site-specific hardware advancements, and perform trade studies, engineering/technical analyses and other technical evaluations and assessments to improve the overall reliability and performance of the test and training events and exercises. The contractor will develop mechanisms to review and assess emerging technologies, provide recommendations to improve reliability, and provide safe and secure processes for range and facility operations.

The contractor shall provide the Government quarterly Performance and Reliability Enhancement Reports, in support of this task order NTE (8) over the expiration of the TO's base period and executed Option Period.

These reports shall be based on the analysis of hardware to identify improvements in reliability and performance of the distributed test and training environment. The contractor shall prepare recommendations to improve performance and reliability of the test and training capability including hardware as identified through research and analysis. The report should include, at minimum, background, description of potential enhancement, research methodology, summary of research findings, potential uses of enhancement, and recommendations.